App. No. 10/605,186

In the Claims:

Cancel claims 1 - 28

- 29. (new) A system solving a constraint satisfaction problem such as performing a search query comprising: having user choose a first group of constraints; using a single click searching for a solution based on the first group of constraints having said system also search for solutions using modified sets of said constraints such as subsets of said constraints and additional constraints, keeping intermediate results; presenting for review analysis or results of said solutions for such modified sets of constraints; allowing for the user to determine whether or not to search or present results for solutions using a set of such modified constraints; searching or providing results on said modified constraints; and having said system search using one or more of a set of sampling, heuristic, genetic or other non-deterministic algorithm which includes relaxing, tightening or modifying the constraints before reporting said results.
- 30. (new) A system according to claim 29 in which includes having said user access the system using the Internet.
- 31. (new) A system according to claim 29 in which includes having said user access the system through a client-server relationship.
- 32. (new) A system according to claim 29 in which includes having said user enter constraint using an entry means.
- 33. (new) A system according to claim 32 in which having said entry means is entering text.
- 34. (new) A system according to claim 32 in which having said entry means is a dialog box.
- 35. (new) A system according to claim 32 in which having said entry means is a pick list.

App. No. 10/605.186

- 36. (new) A system according to claim 32 in which having said entry means is one or more of a set of radio buttons or graphical aid.
- 37. (new) A system according to claim 32 in which includes having said system search using all said first constraints and additional constraints.
- 38. (new) A system according to claim 32 in which includes having said system search using subsets of said constraints and additional constraints, keeping intermediate results and checking the remaining constraints if needed.
- 39. (new) A system according to claim 32 in which includes using modified constraints.
- 41. (new) A system according to claim 39 in which said modified constraints that have automatically been generated from derived searches.
- 42. (new) A system according to claim 32 in which includes returning analysis such as the number of solutions for each subset of constraints.